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(54) Title: METHODS, KITS AND COMPOSITIONS PERTAINING TO FLUORESCENCE QUENCHING USING PNA **PROBES** 

(57) Abstract: Disclosed for instance, are methods suitable for the detection, identification and/or quantitation of nucleic acid target sequences using probes. Suitable probes include those consisting of peptide nucleic acid (PNA) or locked nucleic acid (LNA) units. Binding of the probes to adjacent target sequences results in fluorescent quenching. Analysis of changes in the fluorescent signal is used to detect, identify or quantitate a target sequence in a sample. The invention is more specifically directed to methods for improving the sensitivity, specificity and/or reliability of diagnostic tests using suitable probes. It is particularly well-suited for real-time PCR and related amplification reaction.



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